

CLAIMS

What is claimed is:

1 1. A radio frequency amplifier that provides an
2 electrical power to an electrode placed in contact with a
3 cornea having a tissue impedance, comprising:
4 a radio frequency electrical circuit calibrated to
5 provide an actual power curve to the cornea within +/- 10%
6 of a desired power curve over an operating range of the
7 tissue impedance.

1 2. The radio frequency amplifier of claim 1, wherein
2 said radio frequency electrical circuit includes an
3 transformer, a capacitor, and a pre-load resistor in
4 parallel with a patient load resistance.

1 3. The radio frequency amplifier of claim 1, wherein
2 the actual power curve varies between .6 to .15 watts.

1 4. The radio frequency amplifier of claim 3, wherein
2 radio frequency electrical circuit applies power to a load
3 with an impedance that varies between 330 to 2600 ohms.

1 5. The radio frequency amplifier of claim 1, wherein
2 said radio frequency electrical circuit generates a series
3 of damped waveforms.

1 6. The radio frequency amplifier of claim 1, wherein
2 the operating range of the actual power curve has a time
3 duration less than 1 second.

1 7. A radio frequency amplifier that provides an
2 electrical power to an electrode placed in contact with a
3 cornea having a tissue impedance, comprising:
4 radio frequency circuit means for providing an actual
5 power curve to the cornea within +/- 10% of a desired power
6 curve over an operating range of the tissue impedance.

1 8. The radio frequency amplifier of claim 7, wherein
2 said radio frequency circuit means includes an transformer,
3 a capacitor, and a pre-load resistor in parallel with
4 patient load resistance.

1 9. The radio frequency amplifier of claim 7, wherein
2 the actual power curve varies between .6 to .15 watts.

1 10. The radio frequency amplifier of claim 9, wherein
2 radio frequency circuit means applies power to a load with
3 an impedance that varies between 330 to 2600 ohms.

1 11. The radio frequency amplifier of claim 7, wherein
2 said radio frequency circuit means generates a series of
3 damped waveforms.

1 12. The power supply of claim 7, wherein the operating
2 range of the actual power curve has a time duration less
3 than 1 second.

1 13. A medical system that can denature a cornea having
2 a tissue impedance, comprising:

3 a radio frequency electrical circuit calibrated to
4 provide an actual power curve to the cornea within +/- 10%
5 of a desired power curve over an operating range of the
6 tissue impedance;

7 an electrode coupled to said radio frequency electrical
8 circuit and which is placed into contact with the cornea;
9 and,

10 a ground element coupled to said radio frequency
11 electrical circuit.

1 14. The system of claim 13, wherein said radio
2 frequency electrical circuit includes a transformer, a
3 capacitor, and a pre-load resistor in parallel with patient
4 load resistance.

1 15. The system of claim 13, wherein the actual power
2 curve varies between .6 to .15 watts.

1 16. The system of claim 15, wherein said radio
2 frequency electrical circuit applies power to a load with
3 an impedance that varies between 330 to 2600 ohms.

1 17. The system of claim 13, wherein said radio
2 frequency electrical circuit generates a series of damped
3 waveforms.

1 18. The system of claim 13, wherein the operating
2 range of the actual power curve has a time duration less
3 than 1 second.

1 19. A medical system that can denature a cornea having
2 a tissue impedance, comprising:
3 an electrode that is placed into contact with the
4 cornea;
5 radio frequency circuit means for providing an actual
6 power curve to said electrode and the cornea within +/- 10%
7 of a desired power curve over an operating range of the
8 tissue impedance; and,
9 a ground element coupled to said radio frequency
10 circuit means.

1 20. The system of claim 19, wherein said radio
2 frequency circuit means includes a transformer, a
3 capacitor, and a pre-load resistor in parallel with patient
4 load resistance.

1 21. The system of claim 19, wherein the actual power
2 curve varies between .6 to .15 watts.

1 22. The system of claim 21, wherein radio frequency
2 circuit means applies power to a load with an impedance
3 that varies between 330 to 2600 ohms.

1 23. The system of claim 19, wherein said radio
2 frequency circuit means generates a series of damped
3 waveforms.

1 24. The power supply of claim 19, wherein the
2 operating range of the actual power curve has a time
3 duration less than 1 second.

1 25. A method for correcting a vision of a cornea
2 having a tissue impedance, comprising:
3 applying power to the cornea with a power curve that is
4 within +/- 10% of a desired power curve over an operating
5 range of the tissue impedance.

1 26. The method of claim 25, wherein the power is
2 applied in a circular pattern about the cornea.

1 27. The method of claim 26, wherein the circular
2 pattern has a diameter between 6 to 8 millimeters.

1 28. The method of claim 25, wherein a tip of the
2 electrode is inserted into the cornea.

1 29. The method of claim 25, wherein the applied power
2 varies between .6 to .15 watts.

1 30. The method of claim 25, wherein the power is
2 applied to a load with an impedance that varies between 330
3 to 2600 ohms.